Publ Condor 37; 251-253 Sept 1935
(not exactly like this journal)

Mycteria

During the last year I have been going over several boxes of bones excavated from Rancho La Brea by the Southern California Academy of Sciences. This material was given to the Los Angeles Museum many years ago, but much of it was still coated with tar and it had never been added to the regular museum collection.

In this material I have found a fragment of mandible, a proximal end of tarsus and a complete carpus of Wood Ibis. The Wood Ibis was early recorded from La Brea by Miller (Univ. Calif. Publ. Dept. Geol, vol 7, p. 78, 1912). Later, in referring to this record, Miller says (Carnegie Instit. Wash. Pub. 349, pp. 73-74, 1925) "The record was based upon the very characteristic symphyseal region of the lower jaw in the collections made by the Los Angeles High School under direction of Mr. J. Z. Gilbert. The specimen has been lost to sight, hence the record can not be reviewed in this paper with positive results. There is no doubt in the mind of the writer, however, as to the very close affinity if not identity of this fragment with the Recent Mycteria americana." Dr. Miller, upon seeing the mandible from the Souther California Academy excavation, is convinced that this is the specimen upon which he based his record. Since Dr. Gilbert was in charage of both the Los Angeles High School and the Southern Califonria Academy excavations, it is not difficutl to understand how confusion may have arisen regarding the collection from which the mandible came.

The specimen, as Dr. Miller said, is undoubtedly close to Mycteria americana. However it is strikingly large and appears less curved than the modern species. Though it is difficult to make exact comparison with the living form since the mandible bears no definite mark which can be used as a point of reckoning, combined details give a fairly accurate basis of comparison.

On the fragment of the fossil mandible the dorsla edges of the rami toward the posterior end, are still parallel, they have not begun to flare outward; the flaring of these edges in the modern species begins just a little more than one-third of the distance back from the tip of the mandible, with some small variation. This calculation coincides also with the faint lateral grooving near the dorsal edge, a portion of which is visible in the fossil fragment. It is estimated, therefore, that the fossil specimen represents approximately the last third of the mandible, with the exception of the extreme tip, which is missing.

In both size and curvature the fossil bone differs from the nine modern specimens available to me in the combined collections of Dr. Loye Miller and the Los Angles Museum. Fearing that a larger series of specimens might reveal a greater range of variation however, I communicated with Dr. Wetmore who very generously offered to compare the bone with the specimens in the U. S. National Museum collections. The result of all comparisons is the decision that the Ramcho La Brea bird was a distinct species. It is therefore here described as:

Mycteria wetmorei, new species

Type: Fragment of lower mandible, Los Angeles Museum no. K3527 from excavations by So. Calif. Acad. Sci., north bank of "pool" near Wilshire Blvd., Rancho La Brea, Los Angeles, Calif., Pleisto.

Description: From roughly 30 to forty percent larger than Mycteria americana. With tip restored (approximately 14.5mm.) fossil fragment measures 134 mm. A comparable portion of the largest available specimen of M. americana measures 86mm., of the smallest, 76mm.

Description: Roughly from thirty to forty five per cent larger than Mycteria americana. Available fragment 121 mm. in length, from which length to tip is estimated at 135mm. Comparable portion of mandible of M. americana measures, largest 90 mm., smallest 76 mm. ~~or from 38 to 46 per cent,~~ xxxxxxxth

~~The~~ Curvature slight, amounting, along ventral edge, to a 13.5° arc of a circle about 326 cm. in circumference. Straightest mandible of M. americana avaialbe measured over comparable distance, equals 15.5° arc of a circle about 192 cm. in circumference.

Referred material: Proximal end of tarsometatarsus, Los Anglees Museum no. from same locality as type.

In general characters similar to M. americana. Distinguished from members of the ciconiine subfamily by more proximal position of hypotarsus, differing from that species, however, in the following details.

(1) Ten per cent broader acorss proximal end than largest available specimens of M. amer.

(2) Large surface for muscle attachment distal to external cotyla at its posterior edge facing directly laterally; this surface deflected posteriorly in M. amer.

(3) Posteriorly, region between articular facets and calcaneal ridges less excavated than americana and traversed by faint, even ridge running from internal cotyla to muscle surface mentioned above (under 2); possibly comparable to this ridge in amer. is a short, i regular raised area extending from external cotyla past the middle of the bone but not reaching the muscle surface.

(4) Intercotylar prominence lower and broader than in amer. height of prominence relative to breadth of articular facets, 91%, as compared with 97 to 103 per cent in amer.; breadth relative to height of prominence, 30.4 percent, contrasted with 24 to 26.6 percent in amer.

Measurements:

Campus A

no.
~~[illegible]~~ The carpometacarpus may or may not belong with this species. It's size, 104.6 mm. is exceeded by large specimens of M. amer. (Dr. Wetmore gives me a measurement of 110 on one of his specimens) and there are no outstanding characters which distinguish the bone from the modern species. This element, however, is never very communicative, so the absence of distinguishing features is not necessarily important. There are three possublities presented by the occurrence of this specimens.

(1) The presence of Mycteria americana, represented by the single carpus; (2) M. wetmorei may have been a bird of relatively small body and wings with larger beak and sturdier proportions similar to M. amer. and legs. (3) M. wetmorei may have had a range in size to include the smaller carpus. In this case each of the three elements probably represents a separate individual

The three elements

Discussion: Several explanations present themselves regarding the occurrence of the three elements here discussed. It is significant that no where else in the Rancho La Brea excavations has Mycteria been found. The specimens in question, hterefore may represent a single individual, with exceptionally large beak, sturdy legs and small wings. I have noted in specimens of M. americana that the size of different elements does not vary in exact proportion throughout the skeleton. In ratios of compared measurements of mandibular length, tarsal breadth and carpometacarpal length a large individual exceeded a small one by 8 per cent, 5 percent and 2 per cent respectively for the measurements

On the other hand each element may have belonged to a separate individual, one of which may have been M. americana, or all three M. wetmorei. In the latter case the fossil species though perhaps less than it might seem from the extremes of large mandible must be supposed to have had considerable range in size. and smaller carpus.

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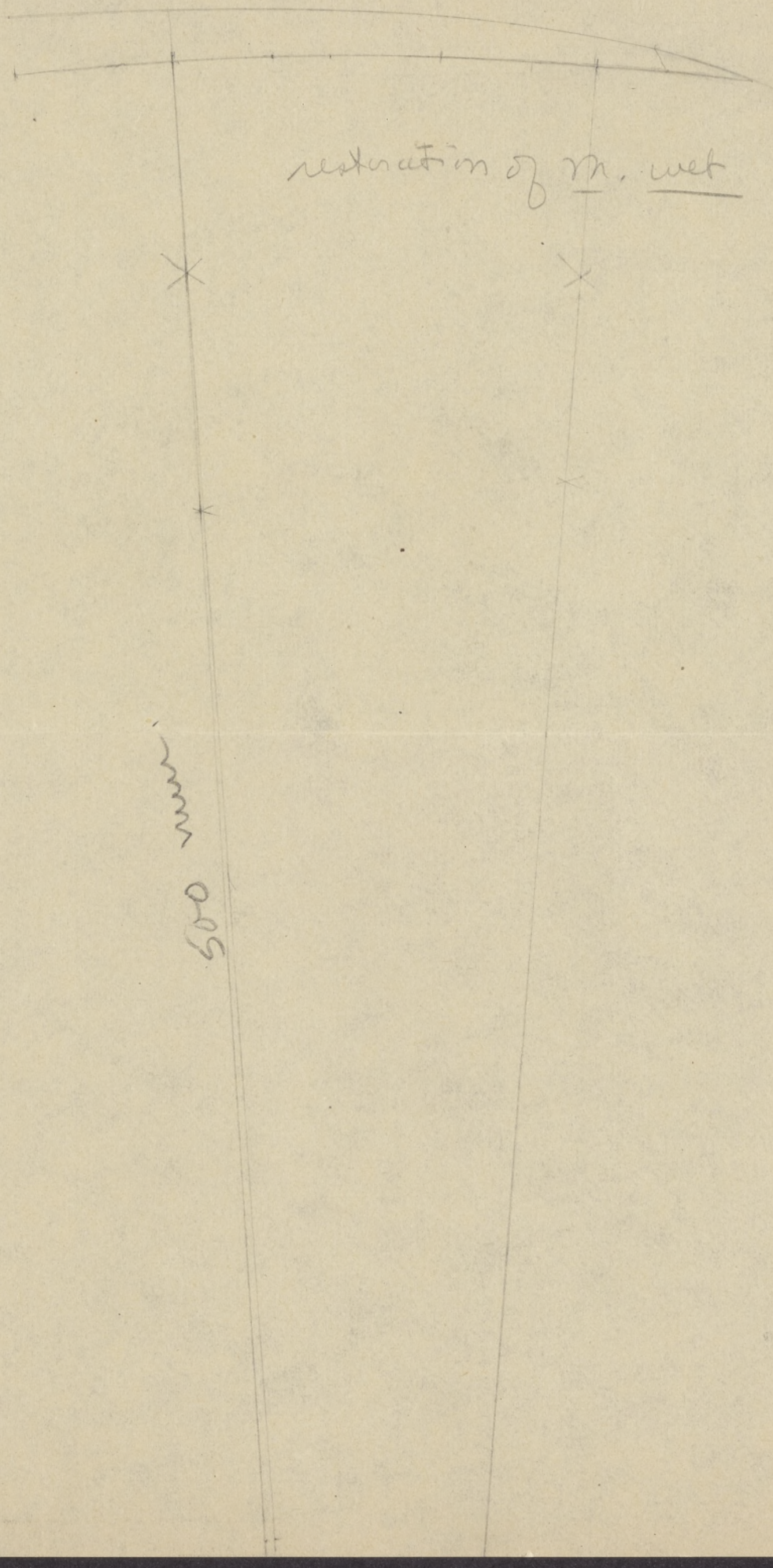
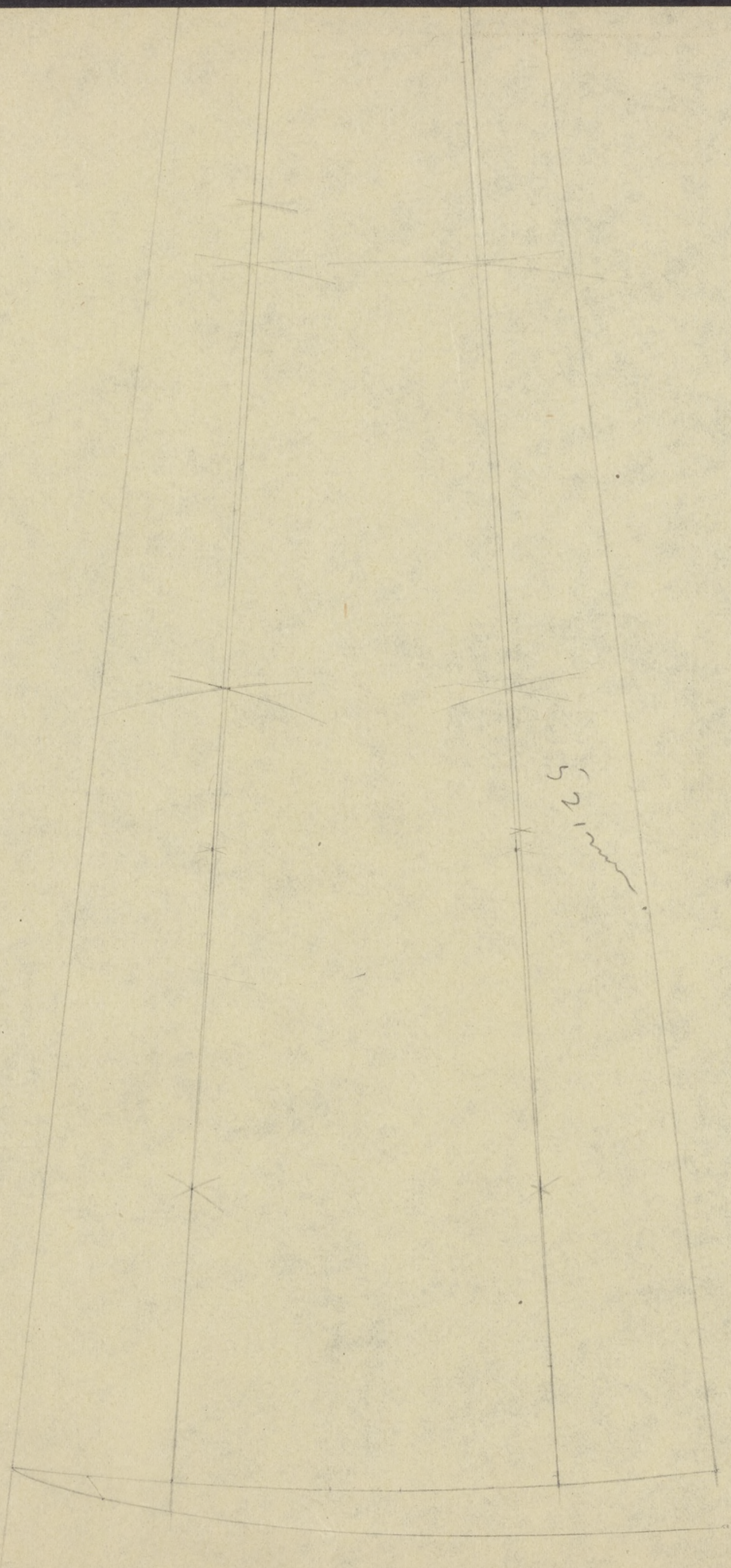
The species name is chosen in honor of Dr. Alexander Wetmore whose kindly interest, and generous assistance in the matter of determining the correct status of this species have greatly facilitated the description of this form.


restoration of M. wet
500 mm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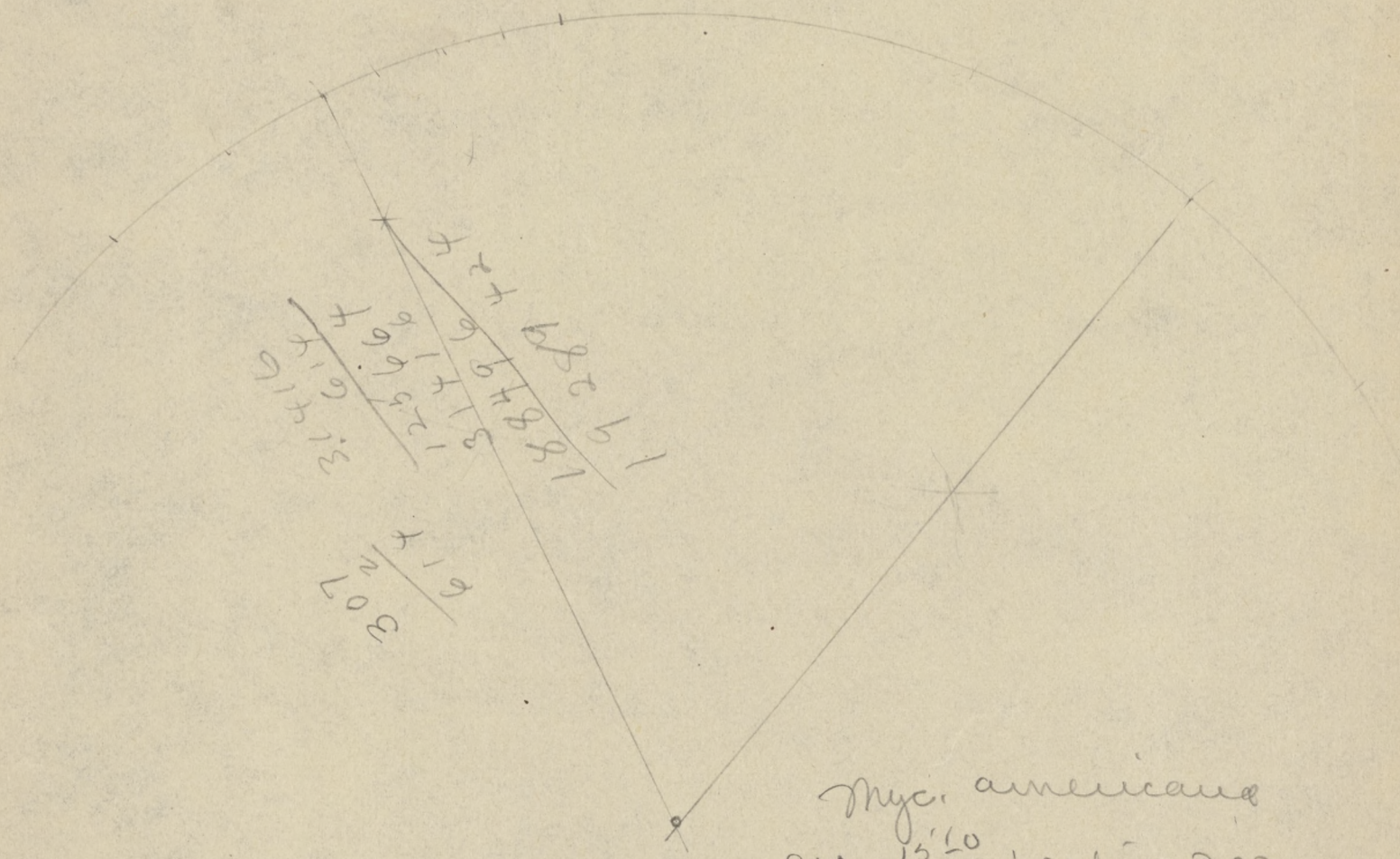
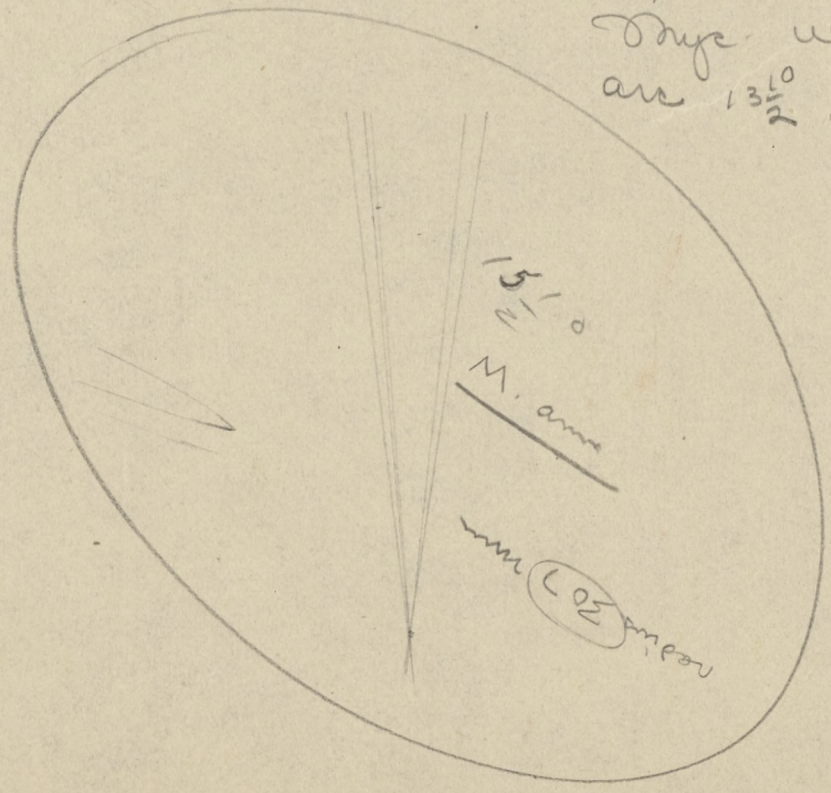


Myc. americana
arc $15\frac{1}{2}^0$; radius 309 mm

Myc. metnoïa
arc $13\frac{1}{2}^0$ radius 520 mm,



found	18.0	14.4	19.3	19.0	19.7	11.9	107.	101	94.7	20.0	90.1	80.1	10.6	11.1	67.2	87.3	61.7
18257	15.8	11.8	17.1	16.8	18.3	10.0	108	101	94.1	18.0	87.7	74.7	9.1	9.5	63.3	87.4	58.5
10.001	15.6	11.6	16.6	16.8	16.5	9.3	106	99	93	17.2	90.7	74.5	9.2	9.7	59.6	81.5	56.6
19616	16.0	—	17.5	17.3	18.7	10.6	110	101	92.5	17.7	90.5	—	9.8	67.3			60.0
709	15.7	11.1	16.4	16.4	17.4	9.6	104	wo	95.7	17.0	82.3	70.7	9.3	9.4	61.2		58.5
258	15.0	10.7	16.0	15.8	18.8	9.4	106	101	93.7	16.3	92.1	71.4			62.6		58.7

91.1 — 30.4

wo — 26.6

98.3 — 24.8

96.8 — 26.4

102.5 — 25.4

103.2 — 23.8

(subtrochl) → " (extrochl)

	length a	Depth b	Depth c	HP 1	length 2	ba	ca	da	ea
fossil	101.2	20.9	18.8	13.0	32.1	20.6	18.5	12.8	31.7
709	97.1	20.5	15.4	12.0	32.8	21.1	18.9	12.3	33.0
258	95.5	20.4	18.1	12.3	30.2	21.3	18.9	12.8	31.8

campus

39

250) 95,5.0
75 0 0
20 5 0 0

258

Myatenia campus

273.0

278.8

15.8

17.9

135
3
405

250
3 4
256

235' 7.3 8.3

25'5' - 7.9 - 8.8

398

27 mm 10.1 - 11.6

25 mm 9.5 - 10.5' - 36.870 40.7

325
303 10.3 11.7
256 8.5 9.3

258
36
294

Taxus mysteria